LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A surface acoustic wave sensor comprising: a sensor body having

a central part and opposite smoothed edge zones outward of the central part; an antenna for the body,

a transducer for converting electromagnetic waves at the antenna into mechanical waves which run along the sensor body;

first reflectors on the sensor body and inward of the edge zones for together detecting changes in the spacing between the first reflectors due to change in the body; and

additional reflectors arranged at one of the smoothed edge zones in order to reflect signals which are used for evaluation of the current temperature.

- 2. (previously presented) The surface acoustic wave sensor as claimed in claim 1, wherein the smoothed edge zone on which the additional reflectors are disposed has a length outward of the central part that corresponds to approximately three times the thickness of the material of the sensor body.
- 3. (previously presented) The surface acoustic wave sensor as claimed in claim 1, further comprising an adhesive on a surface of the sensor body by which the sensor is mounted on a substrate material to be measured.
- 4. (previously presented) The surface acoustic wave sensor as claimed in claim 3, wherein the smoothed edge zone has the surface but is an area without the adhesive.